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Applicant: Mikko Heinonen Date: July 8, 2005
Date Filed: July 30, 2003 Docket No.: VALMET-91
App. No.: 10/630,362 Art Unit: 3654
Patent No.: 6,913,223 Issue Date: July 5, 2005
For: Paper Machine Reel-up with Reel Examiner: S. Kim
Nip Loading Measurement

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Patrick J. G. Stiennon, Reg. No. 34934
Name of applicant, assignee or Registered Representative

**Request for Certificate of Correction
With Expedited Processing**

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Alexandria, VA 22313-1450

**Certificate
JUL 14 2005
of Correction**

Dear Sir:

Applicant requests that a Certificate of Correction be issued as shown on the PTO/SB/44
enclosed herewith.

This request for correction is incurred solely through the fault of the United States Patent
and Trademark Office, as is clearly disclosed in the records of the Office. The accompanying
documentation unequivocally supports this assertion of USPTO error, and includes copies of the

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Applicant: Mikko Heinonen
Application No.: **10/630,362**
Art Unit: 3654

relevant pages of the record, so that this request may be processed without the file. The relevant sections of the record have been highlighted in yellow.

Expedited processing is requested under the provisions of the August 21, 2002, Official Notice in 1262 TMOG 96.

Applicant respectfully requests that the typographical errors in the text of the published patent that were not in the original application be corrected by a Certificate of Correction under 37 CFR 1.322.

In column 5, line 15 of the issued patent, "a pivot arm" should be --a pivoting arm-- as written in the amendment dated Jan. 6, 2005, on page 3, lines 1-2.

In column 6, line 21 of the issued patent, "carnage" should be --carriage-- as written in the amendment dated Jan. 6, 2005, on page 5, line 8.

Applicant believes that these Office mistakes include at least one error of consequence that merits the issuance of a Certificate of Correction as it is of such a nature that the intended meaning may not be obvious from the context.

Respectfully submitted,



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Relevant page from printed U.S. Patent No. 6,913,223

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carriage, and each first member being limited in its motion toward the arm of each carriage by a first stop mounted to the at least one arm; and

a load cell, having a maximum load limit, mounted on each of the at least one arm so that during motion of the first member toward the at least one arm, the flexible portion of each of the first members engages the load cell, and wherein the first member, the load cell, and the stop are arranged so that when the first member is engaged with the stop, the selected spring constant of the flexible portion is such that the loading applied to the load cell is less than the maximum load limit of the load cell.

2. The reel-up of claim 1 wherein the first member forms a pivot arm which is pivotally mounted by a pivot base to a pivot bearing on the carriage, and the pivoting arm is formed by a flexible cantilever beam which extends from the pivot base and is engageable with the stop and the load cell, and wherein the pivoting arm is positioned between the load cell and the reel spool.

3. The reel-up of claim 2 further comprising a second stop mounted to the carriage upstream of the first member to prevent the first member from pivoting in the upstream direction.

4. The reel-up of claim 1 further comprising a pair of parallel rails, and wherein said at least two carriages are mounted for motion on said pair of parallel rails.

5. A method of measuring the load applied to a nip between a forming paper reel and a reeling cylinder, comprising the steps of:

forming the paper reel on a reel spool;

supporting the reel spool between a pair of spaced apart carriages;

moving the paper reel mounted on the pair of spaced apart carriages into engagement with the reel cylinder and forming the nip between the reel cylinder and the forming paper reel;

pressing on the reel spool by engaging the reel spool with first members mounted on each carriage, each first member having flexible portions having a selected spring constant, and each first member being mounted to one of said two carriages for motion toward a stop, the reel spool being thereby urged against the reel cylinder to define the nip; and

measuring the force applied to the defined nip with a load cell mounted on each carriage, the load cells having a

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selected maximum capability, and each load cell being mounted so as to be engaged by one of the first members, wherein a maximum load with which the first member can engage the load cell is controlled by the selected spring constant of the flexible portions of the first members and the stops mounted on the carriages, so that when the stop is engaged by the first member the flexible portions are engaging the load cell at a load which is less than the selected maximum capability of the load cell.

6. The method of claim 5 wherein the spring constant is selected to control the maximum load with which the first members can engage the load cells to be approximately the maximum range of the load cell.

7. The method of claim 5 wherein the first members are pivotally mounted to the carriages, and pivot toward the stop as the carriages press against the reel spool, wherein the flexible portions of each of the first members is formed by a flexible beam which extends between a pivot base and the stop, the flexible beam having the selected spring constant, and engaging the load cell positioned on the carriage between the pivot mount and the stop.

8. A method of measuring the forces in a reel-up comprising the steps of:

urging a loading member mounted to a reel-up frame against a reel spool, with a first selected force to urge the reel spool towards a reeling cylinder, the loading member being mechanically arranged to apply to a load cell mounted on the reel-up frame a force proportional to the first selected force applied to the reel spool;

selecting the loading member so that a portion of the loading member has a selected spring constant, so that the portion of the selected member deflects under load, so that as the loading member engages and loads the reel spool urging it towards the reeling cylinder, the loading member portion having the selected spring constant deforms elastically until it engages a stop mounted on the reel-up frame, the selected spring constant being selected to control the maximum load on the load cell when the loading member is engaged with the stop.

9. The method of claim 7 wherein the spring constant is selected to control the maximum load with which the first members can engage the load cells to be approximately the maximum range of the load cell.

* * * * *

Relevant pages from amendment in U.S. Application No. 10/630,362,
filed on January 6, 2005

Applicant: Mikko Heinonen
Application No.: 10/630,362
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2. (currently amended) The reel-up of claim 1 wherein the first member forms a pivoting arm which is pivotally mounted by a pivot base to a pivot bearing on the carriage, and the pivoting arm is formed by a flexible cantilever beam which extends from the pivot base and is engageable with the stop and the load cell, and wherein the pivoting arm is positioned between the load cell and the reel spool ~~is positioned downstream of the flexible member between the stop and the pivot.~~

3. (original) The reel-up of claim 2 further comprising a second stop mounted to the carriage upstream of the first member to prevent the first member from pivoting in the upstream direction.

4. (original) The reel-up of claim 1 further comprising a pair of parallel rails, and wherein said at least two carriages are mounted for motion on said pair of parallel rails.

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Art Unit: 3654

6. (currently amended) The method of claim 5 wherein the spring constant is selected to control the maximum load with which the first members can engage [[on]] the load cells to be approximately the maximum range of the load cell.

7. (currently amended) The method of claim 5 wherein the first members are pivotally mounted to the carriages, and pivot toward the stop as the carriages press[[es]] against the reel spool, wherein the flexible portions of each of the first members [[being]] is formed by a flexible beam which extends between a pivot base mount and the stop, the flexible beam having the selected spring constant, and engaging the load cell positioned on the carriage between the pivot mount and the stop.

8. (original) A method of measuring the forces in a reel-up comprising the steps of:
urging a loading member mounted to a reel-up frame against a reel spool, with a first selected force to urge the reel spool towards a reeling cylinder, the loading member being mechanically arranged to apply to a load cell mounted on the reel-up frame a force proportional to the first selected force applied to the reel spool;

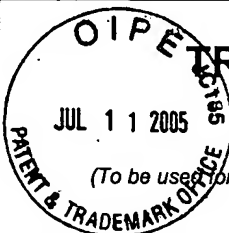
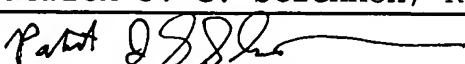
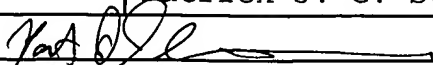
selecting the loading member so that a portion of the loading member has a selected spring constant, so that the portion of the selected member deflects under load, so that as the loading member engages and loads the reel spool urging it towards the reeling cylinder, the loading member portion having the selected spring constant deforms elastically until it engages a stop mounted on the reel-up frame, the selected spring constant being selected to control the maximum load on the load cell when the loading member is engaged with the stop.

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 <h1 style="margin: 0;">TRANSMITTAL FORM</h1> <p style="margin: 0;">(To be used for all correspondence after initial filing)</p>		Application No.	10/630,362	
		Filing Date	July 30, 2003	
		First Named Inventor	Mikko Heinonen	
		Group Art Unit	3654	
		Examiner Name	S. Kim	
Total Number of Pages in This Submission		Attorney Docket Number	VALMET-91	
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts Under 37 CFR 1.52 or 1.53 </div> <div style="width: 30%;"> <input type="checkbox"/> Assignment Papers (For an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) And Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund </div> <div style="width: 35%;"> <input type="checkbox"/> After Allowance Communication To Group <input type="checkbox"/> Appeal Communication to Board Of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (Please identify below): </div> </div> <div style="margin-top: 10px; border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> PTO SB/44 Certificate of Correction Request for Certificate of Correction with attached copy of relevant documents </div>				
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JUL 15 2005

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO : 6,913,223
DATED : July 5, 2005
INVENTOR(S): Mikko Heinonen

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In column 5, line 15 of the issued patent, "a pivot arm" should be --a pivoting arm--

In column 6, line 21 of the issued patent, "carnage" should be --carriage--

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